

AIDS - A Global Perspective

AIDS Prevention and Control in Japan

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Surveillance for the acquired immunodeficiency syndrome (AIDS) in Japan started in September 1984 and in February 1987 was extended to seropositive carriers of human immunodeficiency virus (HIV) antibodies. A total of 2,000 hospitals and clinics throughout the country have actively participated in the surveillance. An educational program for health care workers, including physicians, was initiated in July 1985 by issuing a series of government memoranda and distributing pamphlets and posters. Counseling programs for people concerned about AIDS and laboratory support to provide screening services have been developed. Laboratories that can also perform confirmatory tests will be established shortly. The screening of all donated blood was established in November 1986.

Education programs for the public have been conducted mainly through the production and distribution of various materials and pamphlets. Research has been focused primarily on diagnosis and treatment, with international cooperation emphasized. A new act of legislation has been proposed in the Parliament that will require mandatory reporting of cases of AIDS and HIV infection with confidentiality preserved. Further debate may be needed to reach national consensus on this issue. The proposed law will not include provisions that would affect international travelers, foreign students or immigrants.

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The first case of the acquired immunodeficiency syndrome (AIDS) was reported in Japan in March 1985, and as of August of this year, 50 cases have been reported to the Ministry of Health and Welfare. Although the number of AIDS cases is increasing in Japan, the prevalence rate is much smaller than that of countries in North America and Western Europe.

A surveillance system was established in September 1984 to identify cases of AIDS as soon as possible and to prevent secondary infection. Laboratory screening for the human immunodeficiency virus (HIV) antibody in donated blood was initiated in two large metropolitan cities (Tokyo and Osaka) in February 1986 and was expanded nationwide in November 1986. As of August 1987, 298 HIV-antibody carriers have been reported throughout the country.

Epidemiology

Of the 50 reported AIDS cases in Japan, 46 are male and 4 are female; 28 have died (Table 1). A breakdown of the male cases is 29 hemophiliacs, 15 homosexuals (of whom 3 are foreigners), 1 heterosexual and 1 case of undetermined origin. Of the four women, two are foreigners and all are heterosexual. The first Japanese female case, known as the "Kobe

case," is a 29-year-old woman who had been married to a foreigner and lived abroad. She divorced her husband, returned to Japan and apparently was a prostitute for six to seven years in the Kobe area, Hyogo Prefecture, before she was diagnosed with AIDS in January 1986.

Following publicity in the Kobe area, approximately 12,000 consultation visits and telephone inquiries to the city authorities were made from all over the country, and more than 4,800 serologic tests were performed for concerned residents within five weeks. The test results indicated no seropositivity among those concerned. This woman's case brought a lot of publicity, which stimulated formation of the national AIDS prevention and control program in Japan, including proposed legislation on AIDS.

Of the 298 people identified as seropositive for HIV, 248 (83%) have hemophilia and 24 (8%) are homosexual, 18 (6%) heterosexual and 8 (3%) undetermined. Of the heterosexuals, 14 are men, and all had contacts with female prostitutes while abroad in Africa, Europe or the United States. Three seropositive women are spouses of infected hemophiliacs. Two others, a man and a woman, are believed to be infected by domestic heterosexual contact. About 50% of all carriers so far reported are within the 20- to 48-year age groups (Table 2).

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Surveillance

Surveillance of AIDS cases began in September 1984 in collaboration with approximately 600 hospitals and clinics throughout the country after the establishment of a National Committee on Survey for AIDS. In May 1986 the number of the collaborating institutions was expanded to approximately 2,000. A Subcommittee on AIDS Surveillance was organized under the newly renamed National Expert Committee on AIDS.

The surveillance system for seropositive persons, separate from that of AIDS cases, was also established in February 1987. At present the two independent systems are in operation under the AIDS Surveillance Committee.

Both surveillance systems are voluntary reporting systems based on a network of the approximately 2,000 collaborating institutions all over Japan. They consist primarily of all national hospitals, other public general hospitals and those institutions, including health centers and clinics for sexually transmitted diseases, that the prefectural governments specifically request for collaboration.

The current surveillance systems on AIDS, suspected cases as well as HIV-seropositive persons, are shown in Figures 1 and 2. The Ministry of Health and Welfare requests the collaborating hospitals and clinics, through the 47 prefectural governments, to report cases and suspected cases of AIDS using a structured questionnaire originally prepared by the National AIDS Experts Committee. The report form includes the name of the collaborating institution and the following information about the patient:

- social and risk factors, including past and present status of sexual life and treatment history;

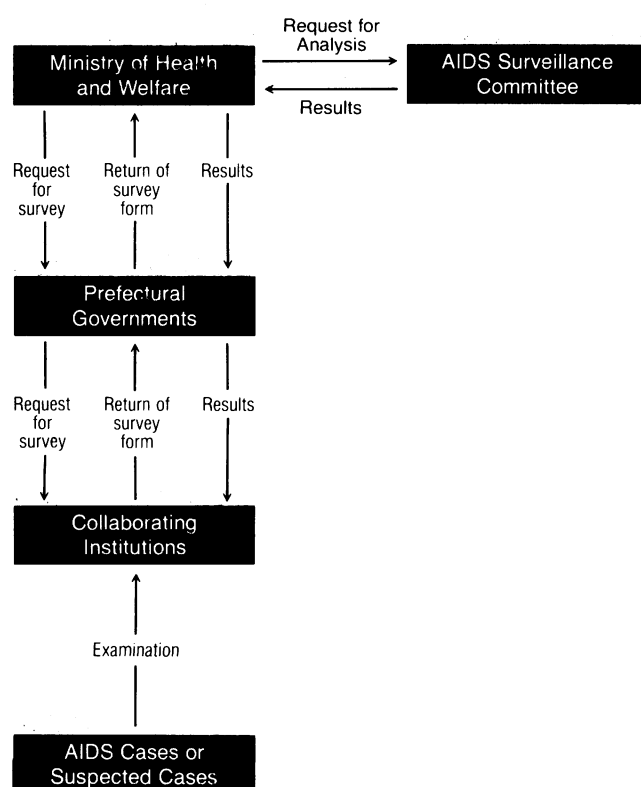


Figure 1.—Nationwide survey system for AIDS cases and suspected cases as of February 1987. Note: Follow-up of reported cases would be made when and if necessary.

TABLE 1.—Cases of the Acquired Immunodeficiency Syndrome (AIDS) By Sex and Risk Group and Seropositive Carriers, As of August 1987*

Risk Group	AIDS Cases, No.			Carriers, No.
	Male	Female	Total	
Homosexual	15 (4)	...	15 (4) [6]	24
Heterosexual contact . .	1	4 (2)	5 (2) [3]	18
Hemophiliac	29	0	29 [18]	248
Unknown	1	0	1 [1]	8
Total	46 (4)	4 (2)	50 (6) [28]	298

* () denotes foreigners and [] deaths.

TABLE 2.—Carriers of the Human Immunodeficiency Virus (HIV) By Age, As of August 1987

Age, Years	HIV Carriers, No.
<20	111
20-29	88
30-39	51
40-49	18
≥ 50	26
Unknown	4
Total	298

- opportunistic infections/AIDS-specific diseases;
- nonspecific diseases;
- signs and symptoms lasting more than one month after onset (suspicion);
- other diseases before onset;
- immunosuppressive treatment for three months before onset;
- laboratory results, including status of HIV antibody;
- consanguineous marriage;
- physician's comments.

The collaborating institution forwards the completed report form to the Ministry through the prefectural government. The Surveillance Committee then analyzes these reports and reports the results to the Ministry. The Ministry then regularly makes public announcements on the results in terms of number of cases and deaths by risk factor. The collaborating institutions would, if necessary, follow up the suspected cases on the basis of the Ministry's report.

The surveillance system for seropositive persons is basically the same as that for AIDS except that the collaborating institutions may send back the survey forms directly (without passing through the prefectural governments and the Ministry) to the Surveillance Committee. This survey form includes information on the reporting institutions, the age and sex of patients, method of transmission, presence or absence of signs and the laboratory methods used for HIV antibody testing.

The Ministry periodically announces the results of monthly and cumulative number of seropositives, which are subject to analysis by the Surveillance Committee. The collaborating institution that reports a positive carrier is not obliged to follow up cases in the present surveillance system. Both report forms are treated strictly confidentially.

Preventing Secondary Infections

The education program for health care workers was initiated in July 1985 by issuing a government memorandum for-

mulated by the Ministry of Health and Welfare on the precautions recommended regarding management of AIDS patients. Along with the expansion of a surveillance network, information on health education for AIDS patients and HIV carriers was distributed to all collaborating institutions for surveillance. This includes information on general preventive measures such as no sexual contact with high-risk groups, no anal intercourse, and the use of condoms; preventive measures in the homes of AIDS patients and in health care facilities; preventive measures for HIV seropositive persons, and confidentiality for patients, healthy carriers and their families.

The Ministry of Health and Welfare also issued a memorandum in 1987 on the prevention of HIV infections to assist the local governments and organizations in carrying out community health education on AIDS. The memorandum contains, among other things, a general description of AIDS, general preventive methods, including prevention of infection from blood or sexual transmission, preventive measures for secondary infection from seropositive persons and a discussion of other subjects, including confidentiality of information obtained.

Consultation Program for the Public

The consultation program for the public on AIDS was encouraged by establishing in 1985 at least one focal consultation clinic for concerned people in all prefectures of the country. This program has been expanded, and such consultation can now be made in at least one clinic in each of the prefectures and at all of the approximately 850 health centers throughout the country. Two national workshops for counselors were held in 1985 and 1987.

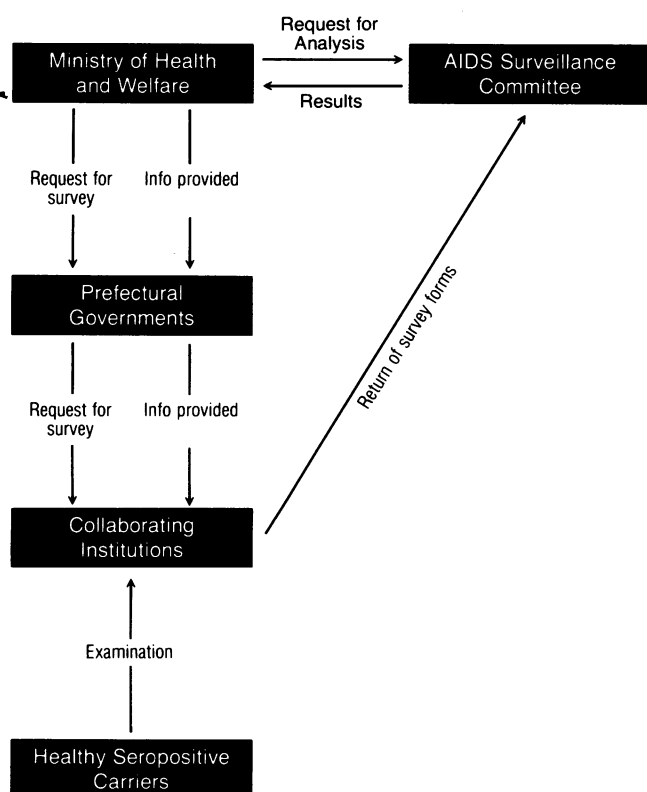


Figure 2.—Nationwide survey system for seropositive persons (carriers) as of February 1987.

Establishment of the Laboratory Systems for Screening

Laboratory support to ensure that at least one laboratory center in each prefecture can provide screening and confirmatory test services has been developed. The screening is based on enzyme-linked immunosorbent assay or particle agglutination testing, with the diagnosis confirmed with either indirect immunofluorescence assay or the Western blot test. The National Institute of Health in Tokyo and 16 prefectural public health laboratories have been equipped and personnel trained for the supplementary testing by immunofluorescence methods for confirmation. According to the national plan, however, at least one laboratory center in each prefecture that can perform both screening and supplementary confirmation tests will be established by September 1987.

Program on the Safety of Blood and Blood Products

In Japan the majority of patients with AIDS are hemophiliacs who were treated with imported factor VIII and IX concentrates from the United States. Because the HIV antibody is found among patients with hemophilia, the treatment procedures for those factors would be extremely important in Japan. The high prevalence of HIV infection in patients with hemophilia A and hemophilia B has led the government to introduce safer factor VIII and factor IX concentrates with heat treatment. These were approved by the government in July and December 1985, respectively.

In addition to heat treatment of blood products, HIV antibody testing on the original blood materials has been introduced. Screening tests on donated blood for HIV antibodies were started in February 1986 in Tokyo and Osaka with nationwide expansion intended. In July 1986 the screening program was widened to include eight prefectures. The nationwide screening on all donated blood was then established in November 1986. Approximately 9 million units have been tested each year for HIV antibodies.

It is thought that the risk of HIV infection by blood and blood products is at least greatly reduced and probably eliminated through these preventive measures.

Public Education Program

Education programs for the public have been conducted mainly through the production and distribution by the government of various materials and pamphlets, in collaboration with the National AIDS Experts Committee:

- October 1985—a leaflet for public distribution on "AIDS: Acquired Immunodeficiency Syndrome"
- February 1986—a textbook, *AIDS in Japan*, for teaching personnel
- February 1987—a pamphlet on "What is AIDS?"
- March 1987—a revision of the *AIDS in Japan* textbook
- March 1987—"AIDS" (translation of the United States Surgeon General's report and detailed information for teaching personnel)
- March 1987—A guideline for the medical care of AIDS patients for physicians and production of a poster and videotape.

Research

Research projects are underway at the National Institutes of Health, universities and other Japanese institutions. Re-

search priorities during the past several years have been focused mainly on diagnosis and treatment. Research projects include, among other things, studies on the safety of blood and blood products, improvement of the indirect immunofluorescence assay, development of an immunoadhesive hemagglutination assay, mechanism of the pathogenesis of AIDS, prevention and treatment of HIV carriers and the development of a qualitative assay method for HIV.

To facilitate, promote and coordinate research on AIDS, as well as to advise the Ministry on the prevention and control on the basis of that research, an Advisory Committee on AIDS Control was established by the Ministry of Health and Welfare. The committee consists of 19 experts from the fields of medicine, microbiology, epidemiology, immunology, hematology, pathology, pediatrics, dental surgery and medical zoology. The cabinet also has formulated a coordination meeting on AIDS Prevention and Control, consisting of 14 ministers headed by the Minister of Health and Welfare. The government plans to strengthen exchange of information with foreign countries and international organizations and to contribute to the prevention and control of the spread of AIDS worldwide.

Legislation

A new law concerned with the prevention of AIDS was proposed in the Parliament in early 1987, with a view to determining the necessary measures for preventing the spread of AIDS, as well as to contribute to the improvement and advancement of public health. The proposed law consists of 16 articles, including specification of duties of the prefectural and local authorities, the public and physicians, reporting of seropositive persons (carriers), confidentiality and punitive provisions.

In the proposed law, a person found to be infected with HIV must be notified by a physician and reported to the local authorities. The prefectural governor can not only recommend that a person suspected of having HIV infection have a medical examination but can also order punishment of that person if the recommendations are not followed.

At present, there is no requirement for HIV screening of international travelers in Japan, including foreign students or immigrants. The proposed law will not include any provision that would affect these groups. There is currently a move, however, to add AIDS to the list of infectious diseases that are exclusionary conditions under the existing law in Japan.